

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch
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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:**Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-015910**Date Inspected:** 24-Jul-2010**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1900**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** N/a**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** OBG Trial Assembly**Summary of Items Observed:**

On this date Caltrans OSM Quality Assurance (QA) Inspector Mr. S. Manjunath Math was present during the time noted above for observations relative to the work being performed.

This QA Inspector randomly observed the following work in progress:

Orthotropic Box Girder (OBG) Trial Assembly Areas

Incident Report generated at Cross Beam # 12

This Quality Assurance (QA) Inspector wrote an Incident Report for a Stiffener being out of flatness. The Stiffener was identified as the 6th from the bottom plate at the south end of the Cross Beam at Panel Point (PP) 80. Please reference the Incident Report # 04-0120F4_TL-15_B278_07-24-2010_CB 12_PP 80_Stiffener_Out of Flatness dated July 24, 2010.

Please reference the pictures attached for more comprehensive details.

Segment 8BE

This QA Inspector witnessed the final bolt tension verification on bolts connecting the Suspender Bracket to Deck Panel, Edge Panel and Side Panel Corner Assembly at Panel Points (PP) 66 for Segment 8BE at Bike Path side. The QA Inspector verified the bolt tension on a random basis and the results appeared to be in general compliance.

WELDING INSPECTION REPORT

(Continued Page 2 of 6)

The Inspection was performed against Notification No. 00437 dated July 24, 2010.

The bolt sizes used were M24 x 75 RC Lot # DHGM240020 and the final torque value established was 993 N-m.

The bolt sizes used were M24 x 85 RC Lot # DHGM240015 and the final torque value established was 1133 N-m.

The bolt sizes used were M24 x 100 RC Lot # DHGM240022 and the final torque value established was 527 N-m.

The bolt sizes used were M27 x 85 RC Lot # DHGM270001 and the final torque value established was 1767 N-m.

The manual torque wrench used to verify tension was S/N XO-747. Please reference the pictures attached for more comprehensive details.

Segment 8AW to Segment 8BW

This QA Inspector witnessed the final bolt tension verification on bolts connecting Retro-fit to Side panel T-Ribs and Retro-fit connecting to Longitudinal Diaphragm between Panel Points (PP) 64 to PP 65 for Segment 8AW to Segment 8BW at Counter Weight side. The QA Inspector verified the bolt tension on a random basis and the results appeared to be in general compliance. The Inspection was performed against Notification No. 00438 dated July 24, 2010.

The bolt sizes used were M24 x 60 RC Lot # DHGM240027 and the final torque value established was 572 N-m.

The bolt sizes used were M24 x 70 RC Lot # DHGM240075 and the final torque value established was 680 N-m.

The bolt sizes used were M24 x 75 RC Lot # DHGM240020 and the final torque value established was 600 N-m.

The bolt sizes used were M24 x 85 RC Lot # DHGM240019 and the final torque value established was 550 N-m.

The bolt sizes used were M24 x 90 RC Lot # DHGM240076 and the final torque value established was 474 N-m.

The manual torque wrench used to verify tension was S/N XO-747.

Segment 8BW to Segment 8CW

This QA Inspector witnessed the final bolt tension verification on bolts connecting Retro-fit to Side panel T-Ribs and Retro-fit connecting to Longitudinal Diaphragm between Panel Points (PP) 67 to PP 68 for Segment 8BW to Segment 8CW at Cross Beam side. The QA Inspector verified the bolt tension on a random basis and the results appeared to be in general compliance. The Inspection was performed against Notification No. 00438 dated July 24, 2010.

The bolt sizes used were M24 x 60 RC Lot # DHGM240027 and the final torque value established was 572 N-m.

The bolt sizes used were M24 x 70 RC Lot # DHGM240075 and the final torque value established was 680 N-m.

WELDING INSPECTION REPORT

(Continued Page 3 of 6)

The bolt sizes used were M24 x 75 RC Lot # DHGM240020 and the final torque value established was 600 N-m.

The bolt sizes used were M24 x 85 RC Lot # DHGM240019 and the final torque value established was 550 N-m.

The bolt sizes used were M24 x 90 RC Lot # DHGM240076 and the final torque value established was 474 N-m.

The manual torque wrench used to verify tension was S/N XO-747.

Segment 7AW to Segment 7BW

This QA Inspector witnessed the final bolt tension verification on bolts connecting Retro-fit to Side panel T-Ribs and Retro-fit connecting to Longitudinal Diaphragm between Panel Points (PP) 49 to PP 50 for Segment 7AW to Segment 7BW at Counter Weight side. The QA Inspector verified the bolt tension on a random basis and the results appeared to be in general compliance. The Inspection was performed against Notification No. 00438 dated July 24, 2010.

The bolt sizes used were M24 x 60 RC Lot # DHGM240027 and the final torque value established was 572 N-m.

The bolt sizes used were M24 x 70 RC Lot # DHGM240075 and the final torque value established was 680 N-m.

The bolt sizes used were M24 x 75 RC Lot # DHGM240020 and the final torque value established was 600 N-m.

The bolt sizes used were M24 x 85 RC Lot # DHGM240019 and the final torque value established was 550 N-m.

The bolt sizes used were M24 x 90 RC Lot # DHGM240076 and the final torque value established was 474 N-m.

The manual torque wrench used to verify tension was S/N XO-747.

Segment 7BW to Segment 7CW

This QA Inspector witnessed the final bolt tension verification on bolts connecting Retro-fit to Side panel T-Ribs and Retro-fit connecting to Longitudinal Diaphragm between Panel Points (PP) 52 to PP 53 for Segment 7BW to Segment 7CW at Cross Beam side. The QA Inspector verified the bolt tension on a random basis and the results appeared to be in general compliance. The Inspection was performed against Notification No. 00438 dated July 24, 2010.

The bolt sizes used were M24 x 60 RC Lot # DHGM240027 and the final torque value established was 572 N-m.

The bolt sizes used were M24 x 70 RC Lot # DHGM240075 and the final torque value established was 680 N-m.

The bolt sizes used were M24 x 75 RC Lot # DHGM240020 and the final torque value established was 600 N-m.

The bolt sizes used were M24 x 85 RC Lot # DHGM240019 and the final torque value established was 550 N-m.

WELDING INSPECTION REPORT

(Continued Page 4 of 6)

The bolt sizes used were M24 x 90 RC Lot # DHGM240076 and the final torque value established was 474 N-m.

The manual torque wrench used to verify tension was S/N XO-747.

Segment 7CW to Segment 7DW

This QA Inspector witnessed the final bolt tension verification on bolts connecting Retro-fit to Side panel T-Ribs and Retro-fit connecting to Longitudinal Diaphragm between Panel Points (PP) 55 to PP 56 for Segment 7CW to Segment 7DW at Cross Beam side. The QA Inspector verified the bolt tension on a random basis and the results appeared to be in general compliance. The Inspection was performed against Notification No. 00438 dated July 24, 2010.

The bolt sizes used were M24 x 60 RC Lot # DHGM240027 and the final torque value established was 572 N-m.

The bolt sizes used were M24 x 70 RC Lot # DHGM240075 and the final torque value established was 680 N-m.

The bolt sizes used were M24 x 75 RC Lot # DHGM240020 and the final torque value established was 600 N-m.

The bolt sizes used were M24 x 85 RC Lot # DHGM240019 and the final torque value established was 550 N-m.

The bolt sizes used were M24 x 90 RC Lot # DHGM240076 and the final torque value established was 474 N-m.

The manual torque wrench used to verify tension was S/N XO-747. Please reference the pictures attached for more comprehensive details.

Segment 7DW to Segment 7EW

This QA Inspector witnessed the final bolt tension verification on bolts connecting Retro-fit to Side panel T-Ribs and Retro-fit connecting to Longitudinal Diaphragm between Panel Points (PP) 58 to PP 59 for Segment 7DW to Segment 7EW at Cross Beam side. The QA Inspector verified the bolt tension on a random basis and the results appeared to be in general compliance. The Inspection was performed against Notification No. 00438 dated July 24, 2010.

The bolt sizes used were M24 x 60 RC Lot # DHGM240027 and the final torque value established was 572 N-m.

The bolt sizes used were M24 x 70 RC Lot # DHGM240075 and the final torque value established was 680 N-m.

The bolt sizes used were M24 x 75 RC Lot # DHGM240020 and the final torque value established was 600 N-m.

The bolt sizes used were M24 x 85 RC Lot # DHGM240019 and the final torque value established was 550 N-m.

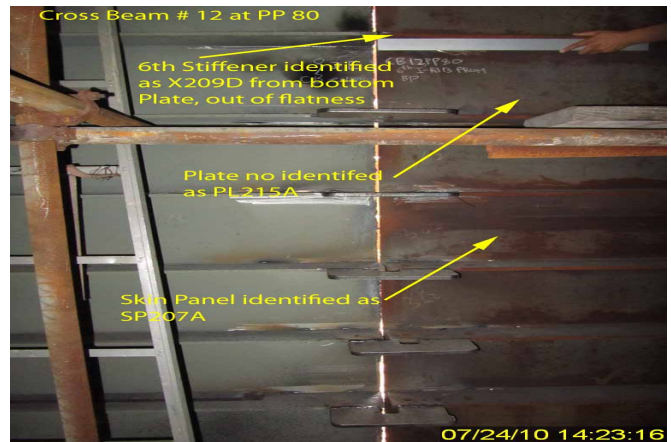
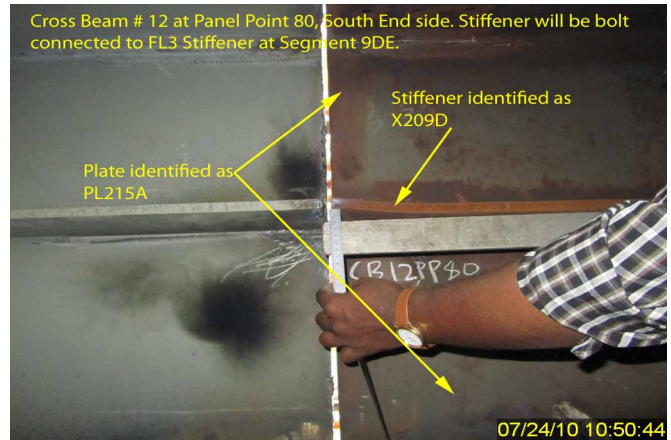
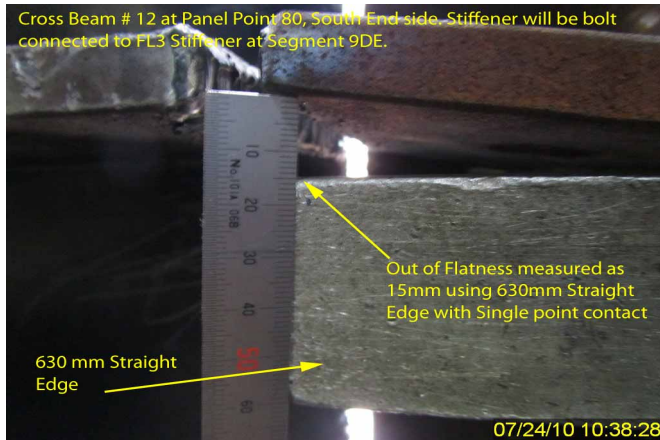
The bolt sizes used were M24 x 90 RC Lot # DHGM240076 and the final torque value established was 474 N-m.

WELDING INSPECTION REPORT

(Continued Page 5 of 6)

The manual torque wrench used to verify tension was S/N XO-747.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.



Summary of Conversations:

No relevant conversations were reported on this date.

WELDING INSPECTION REPORT

(Continued Page 6 of 6)

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang 150000422372, who represents the Office of Structural Materials for your project.

Inspected By:	Math,Manjunath
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Quality Assurance Inspector

Reviewed By:	Peterson,Art
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QA Reviewer
